

## THERMO STRING TYPE NTC THERMISTOR

### 1. Part Numbering (Part Number)

NXF	T	15	XH	103	F	A	2	B	025
Product ID	Individual specifications	Chip dimensions	Temperature characteristics	Resistance	Resistance tolerance	Lead wire specifications	Terminal form	Packaging	Dimensions (Full length)

### 2. Part No. and ratings

Murata P/N (*1)	Resistance value at.25°C	B-constant 25/50°C	Operating current for sensor (mA) (*2, *3)	Operating temperature range (°C)
NXFT15XH103FA2B***	10kΩ ±1%	3380K±1%	0.12	-40~+125
NXFT15XV103FA2B***	10kΩ ±1%	3936K±1%	0.12	
NXFT15WB473FA2B***	47kΩ ±1%	4050K±1%	0.06	
NXFT15WF104FA2B***	100kΩ ±1%	4250K±1%	0.04	

Thermal dissipation constant	1.5mW/°C (*4)
Rated electric power	7.5mW (*2,*4)
Thermal time constant	4sec. (25°C to 50°C in air)

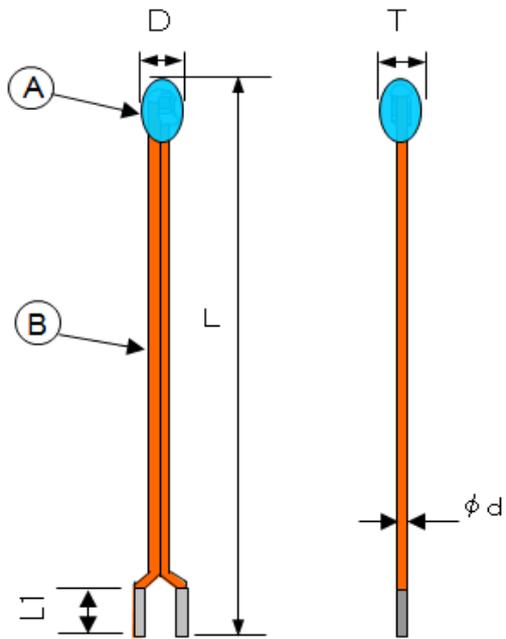
\*1: \*\*\* means the full length (Example : 050=50mm) 25mm, 30~150mm interval 10mm.

\*2 : Measured at 25°C in still air, as a single unit without mounting.

\*3 : Operating current rises for sensor rises Thermo String's temperature by 0.1°C.  
Please regard self heat of the Thermo String.

\*4: Too rapid temperature rising, however, may cause any unexpected failures on your circuit.  
Please do not apply high electric power in short time.

3. Construction and dimensions (in mm)



	Dimensions (mm)	notes
D	1.2±0.4	Resin width
T	1.2±0.4	Resin width
L	25 to100 ±2 110 to150 ±3	Full length
L1	3+2/-1	Soldering part
d	0.30±0.05	Lead wire diameter
(A)	-	Epoxy resin
(B)	-	Copper lead wire with polyurethane coat

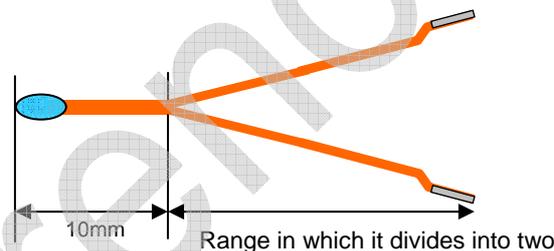
\*The NTC Thermistor in epoxy resin is soldered by Sn-3Ag-0.5Cu

4. Quantity (Standard Quantity)  
1000pcs./unit bag.

## Notice for use

### ⚠ Special Caution

1. Resin of this product is not waterproofing.  
Do not use NTC Thermistor under the following environments because all these factors can deteriorate the characteristics of product or can cause the failures and the burning-out.  
  
(1) Place with splashed water or under high humidity with dewing.
2. This product is using the solder of about 220 °C of melting points. Please perform soldering on the following condition not to melt the solder in resin head.  
(Less than [10 seconds at 260 degrees Celsius] or less than [3.5 seconds at 350 degrees Celsius], and it is 25 mm or more in full length of a product.)  
In the worst case, heat reaches the element part from a lead terminal part, and a solder of our product element region melts it. And that causes fears of break of wire, or short circuit.
3. Please do a quality rating enough by a real machine when bonding, the resin molding, and the resin coating, etc. that are processed to this product. And, please use it after confirming it is unquestionable.  
Especially, please do not process it under the high temperature and the high pressure.  
The stress occurs because of the amount, the resin thickness, bias, and the temperature change of the fabricating materials (bonding material, molding resin, and coating material etc.)  
And, there is a possibility to generate the crack and the characteristic degradation by the stress.
4. A crack goes into resin, an element, and solder, and there are characteristic degradation and fear of failure.  
Do not separate the parallel lead wires 10mm or less from the resin head, when you separate parallel lead wires. Please do not split the lead wire exceeding the range that can be divided of showing in the following.



5. If aggressiveness pressure strong against a resin part is applied, an element will break or crack. Please do not put pressure more than 30N(Normal temperature). Please avoid use in the state where it was pressurized, in a category temperature range.

### ⚠ Caution

1. Applying the power exceeding rated Electric Power may result to deterioration of characteristics, destruction of product or in the worst case, to catching fire. Do not apply the power exceeding rated Electric Power.
2. Exposing the NTC Thermistor to the following environment may result to deterioration of characteristics,  
① Corrosive gas or deoxidizing gas (Cl<sub>2</sub>, H<sub>2</sub>S, NH<sub>3</sub>, SO<sub>x</sub>, NO<sub>x</sub> etc.)  
② Volatile, flammable gas    ③ Dusty place    ④ Low or high air pressure  
⑤ salt water, oil, chemical liquid and solvent.    ⑥ Vibratile place  
⑦ other place equivalent to the above ① through ⑦

CT-006E'

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This information may be changed without a previous notice.

